



RESOURCE AND PATIENT MANAGEMENT SYSTEM

Laboratory Reference

(LR)

Addendum to User Manual

Version 5.2 Patch 1051
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Office of Information Technology
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1.0 Introduction

This document lists various additions/changes to the RPMS Lab package that were brought about by IHS Lab Patch LR*5.2*1051.

This guide provides IHS Laboratorians with descriptions of the changes and/or enhancements and other information.

2.0 IHS Lab Version & Patch Report

The Lab Version & Patch Report Option was added to the BLR IHS Lab Main Support Menu (BLRMENU). The report allows the Laboratorian to display the site's Lab Version number and latest patch.

2.1 LVP IHS Lab Version & Patch Report

The LVP option is available on the BLRMENU.

```

LR      Laboratory DHCP Menu ...
      IHS Lab Main Support Menu

LS      Link Transaction Processor Status
7421    Will restart the 7421 label routine if turned off.
INQ     Inquire into the IHS LAB Transaction Log
FLD     Search Transactions for PCC LINK DISABLE Error
RSN     Requeue by Sequence Number
RST     Requeue Transaction by Sort Template
CPT     Enter/edit IHS Lab CPT File
FAL     Find ALL PCC Link Errors from Lab
STP     Stop/restart Lab to PCC Transaction Processor
MSTR    Enter/edit BLR MASTER CONTROL FILE
POV     Purpose of Visit Compliance Report
6249    Display File 62.49 HL7 Segments
BZY     IHS Taskman Busy Device Rpt
CCCD    Create Creatinine Clearance Delta Check
CDVC    Edit BLR COLL DT PCC VISIT CREATION Parameter
CGFR    Create CKD-EPI Equation Delta Check
CLR     Clear BLR errors from error log
CUM     IHS CUMULATIVE MENU ...
DADD    Add Completed Date to Accession Tests
EAPE    Edit BLR EMERGENCY ALERT Parameter
EDCC    BLR CC DATA Parameter Edit
        Press 'RETURN' to continue, '^' to stop:
EMGP    Edit LAB HIGH URGENCY NOTIFICATION Mail Group
ERRT    Error Trap Reporting
ETP     LA7 Message Queue Error Messages to Purgeable
IHSM    IHS Lab Microbiology Report
ILUM    IHS LOINC/UCUM MENU ...
LABT    Determine if Required RPMS Lab Options Tasked
LOI     IHS Lab Package LOINC Percentage Report
LRAS    Accession IHS Lab Microbiology Report
LROS    Order/test status by Order Number
LTRR    Laboratory Test (#60) File's Reference Ranges
LVP   IHS Lab Version & Patch Report
MACC    Mark Multiple Accessions as Not Performed
MILO    Micro Interim Report by Location
MMR     Lab Description Abbreviation Report
NLO     Lab Tests Without LOINC Entries Report
ORDO    'Open Lab Orders' Reports ...
ORPH    Remove Orphans from # 68
ORPR    BROWSER REPORT ON ORPHANS FROM # 68
PAMG    Edit IHS Lab Parameters and/or Mail Groups ...
PDOC    Patient Reminder Document
POCA    Edit BLR AGE DETAIL Parameter
PURA   Purge VA Alerts

```

```
          Press 'RETURN' to continue, '^' to stop:
RBE      Clear ALL BLR Errors from Error Log
REFL     Reference Lab Main Menu ...
REPL     Replace Lab Order/Test Status ...
SF60     IHS Search File 60
SHDR     State Health Dept Report
TCCR     Test Creatinine Clearance Logic
TGFR     Test CKD-EPI Equation Logic
          Count Accessioned Tests Using Lab Data File ...
          IHS Lab Ask-At-Order ...
```

Figure 2-1: Full display of BLR Menu and LVP Option

2.2 IHS Lab Version & Patch Report for LR*5.2*1051

When the LVP option is selected the report will look similar to the following:

```
DEMO HOSPITAL
Date: 07/27/22          IHS LAB Package          Time:10:15 AM
Current VERSION & PATCH Report
-----
                          IHS Lab Version 5.2
                          Latest IHS Lab Patch: LR*5.2*1051
                          Latest IHS Lab Patch Install Date/Time: JUL 09, 2022 6:39 PM
```

Figure 2-2: IHS Lab Version and Patch Report

3.0 LS Link Transaction Processor Status

The Link Transaction Processor Status Option was added to the BLR IHS Lab Main Support Menu (BLRMENU). This option allows the user to determine whether the processor that passes data from the Transaction Log to PCC is currently running and whether there are any delays in the transmission of data.

3.1 LS Option Link Transaction Processor Status

The LS option is available on the BLRMENU.

```

LR      Laboratory DHCP Menu ...
      IHS Lab Main Support Menu

      LS      Link Transaction Processor Status
7421   Will restart the 7421 label routine if turned off.
INQ    Inquire into the IHS LAB Transaction Log
CPT    Enter/edit IHS Lab CPT File
STP    Stop/restart Lab to PCC Transaction Processor
PAMG   Edit IHS Lab Parameters and/or MailGroups ...
LVP    IHS Lab Version & Patch Report

```

Figure 3-1: Shorten display of BLR Menu – LS Option for PCC LINKER

3.2 Monitoring the Link Transaction Processor Status

Installation of Laboratory Patches often requires the Processor to be turned off. To assure the PCC Linker was turned ON, post installation of the patch, Laboratorians should check the PCC Linker using the LS Link Transaction Processor Status.

The Currently Processing Day ___ should match the current date.

The LS option is available on the BLRMENU.

```

                                DEMO HOSPITAL
                                Processor Status
                                JUL 17, 2022@10:40:05

                                Currently processing day JUL 17, 2022

                                ===== IHS Lab Transaction =====
                                Event      Entry #   in Queue   Sequence #   Date       Time
                                -----
Last Entry Assigned    28        193        79,770      07/17/2022  10:03
Last Entry Processed   28        193        79,770      07/17/2022  10:03

```

Figure 3-2: Processor Status Example

3.3 Link Transaction Processor Status – HALTED

Installation of Laboratory Patches often requires the Processor to be turned off. Occasionally the PCC Linker will not be turned back to ON after the patch was installed.

The Processor Status displays **Halted by user** when the PCC Linker was not restarted. Picture below provides an example of the Processor Status showing the Halted by user, notice the Currently Processing Day does not match the Current Date.

```

                                DEMO HOSPITAL
                                Processor Status
                                AUG 17, 2020@12:18:30

                                Currently processing day AUG 17, 2020

                                -----
                                Event          Entry #   Entry #   IHS Lab Transaction   Date   Time
                                -----
                                Last Entry Assigned 10         1         2,358   08/17/2020
                                23:02
                                Last Entry Processed 10         1         2,358   08/17/2020
                                23:02
                                -- Halted by user
  
```

Figure 3-3: Example of HALTED Lab Processor

3.4 Restart Lab to PCC Transaction Processor

Transaction Processor. To restart the PCC Linker, select the **STP Option**, type your Institution name for the “BLR MASTER CONTROL SITE” prompt, and type **NO** for the “STOP PROCESSOR” prompt.

Example of restarting the PCC Linker is as follows:

```

LR   Laboratory DHCP Menu ...
     IHS Lab Main Support Menu

     LS   Link Transaction Processor Status
     7421 Will restart the 7421 label routine if turned off.
     INQ  Inquire into the IHS LAB Transaction Log
     CPT  Enter/edit IHS Lab CPT File
     STP  Stop/restart Lab to PCC Transaction Processor
     PAMG Edit IHS Lab Parameters and/or Mail Groups ...
     LVP  IHS Lab Version & Patch Report
     POCA Edit BLR AGE DETAIL Parameter

     Select IHS Lab Main Support Menu Option: STP  Stop/restart Lab to
     PCC Transaction Processor

     Select BLR MASTER CONTROL SITE:   DEMO HOSPITAL
  
```

A screenshot of a menu option, likely from a software interface. The text "STOP PROCESSOR: YES// NO" is displayed in a light gray rectangular box with a thin black border. The text is in all caps and uses a monospaced font.

STOP PROCESSOR: YES// NO

Figure 3-4: Shorten display of BLR Menu – Restart PCC Linker

It is recommended to check, again, the status of the Link Transaction Processor Status after restarting the PCC Linker.

4.0 LOINC Update Version 2.70

4.1 VA VistA LOINC Updates

IHS RPMS Lab Patch LR*5.2*1051 brings in two (2) VA VistA Lab Patches that will update the LOINC files to LOINC Version 2.70.

4.2 VA VistA LOINC Patch LR*5.2*452

Laboratory Logical Observation Identifiers Names and Codes (LOINC) are intended to incorporate efficiencies in the Department of Veterans to the LOINC in use. The LAB LOINC file (#95.3) currently contains LOINC version 2.68 which was released in 2020. The goal of this patch is to update the LAB LOINC file (#95.3) and related files to version 2.69.

Files Updated in this patch:

95.3	LAB LOINC
95.31	LAB LOINC COMPONENT
64	WKLD CODE
64.061	LAB ELECTRONIC CODES
64.2	WKLD SUFFIX CODES

4.3 VA VistA LOINC Patch LR*5.2*550

Laboratory Logical Observation Identifiers Names and Codes (LOINC) are intended to incorporate efficiencies in the Department of Veterans to the LOINC in use. The LAB LOINC file (#95.3) currently contains LOINC version 2.69 which was released in 2021. The goal of this patch is to update the LAB LOINC file (#95.3) and related files to version 2.70.

Files Updated in this patch:

95.3	LAB LOINC
95.31	LAB LOINC COMPONENT
64	WKLD CODE
64.061	LAB ELECTRONIC CODES
64.2	WKLD SUFFIX CODES

5.0 State Health Department Report (SHDR)

5.1 Add Patient Race and Ethnicity to The State Health Department Report (SHDR)

The State Health Department Report (SHDR), also known as Non-Microbial State Health Department Report, provides the ability to allow non-microbial tests to be sent in a standard report format to state health departments, based upon criteria determined by the state. The State Health Department Report was modified to include the RACE and ETHNICITY to the patient demographics section of the report.

```
Reporting Test: Hemoglobin A1C

DEMO, PATIENT                114649    02/25/2000    F    CH 0728
19    BLOOD 07/28/22    07/28/22    RADON,NICHOLAS M JR
    15555559833    P.O. BOX 1038    ALB    NEW MEXICO    87119    LAB
Race: AMERICAN INDIAN OR ALASKA NATIVE    Ethnicity: NOT HISPANIC OR LATINO
Result: 10
Current COMMUNITY:    PARKER
```

Figure 5-1: State Health Department Report Patient Example. Race and Ethnicity bolded

5.2 BLRSHDRP Routine

The BLRSHDRP routine was written to display the RACE and ETHNICITY information.

5.3 Security Key BLRSHDRC

The State Health Department Report menu can only be viewed and accessed by users with the new security key BLRSHDRC.

5.4 SHDR State Health Dept Report

The SHDR option is available on the BLRMENU.

```
LR    Laboratory DHCP Menu ...
BLR   IHS Lab Main Support Menu

LS    Link Transaction Processor Status
INQ   Inquire into the IHS LAB Transaction Log
PC41  Will restart the label routine if turned off.
FLD   Search Transactions for PCC LINK DISABLE Error
RSN   Requeue by Sequence Number
RST   Requeue Transaction by Sort Template
CPT   Enter/edit IHS Lab CPT File
FAL   Find ALL PCC Link Errors from Lab
STP   Stop/restart Lab to PCC Transaction Processor
```

```

MSTR  Enter/edit BLR MASTER CONTROL FILE
POV   Purpose of Visit Compliance Report
6249  Display File 62.49 HL7 Segments
BB    Blood bank ...
BZY   RPMS Taskman Busy Device Rpt
CCCD  Create Creatinine Clearance Delta Check
CDVC  Edit BLR COLL DT PCC VISIT CREATION Parameter
CGFR  Create CKD-EPI Equation Delta Check
CLR   Clear BLR errors from error log
CUM   IHS CUMULATIVE MENU ...
DADD  Add Completed Date to Accession Tests
DCL   DISPLAY BUILDING COLLECTION LIST
EAPE  Edit BLR EMERGENCY ALERT Parameter
      Press 'RETURN' to continue, '^' to stop:
EDCC  BLR CC DATA Parameter Edit
EMGP  Edit LAB HIGH URGENCY NOTIFICATION Mail Group
ERRT  Error Trap Reporting
ETP   LA7 Message Queue Error Messages to Purgeable
IHSM  RPMS Lab Microbiology Report
ILUM  IHS LOINC/UCUM MENU ...
LABT  Determine if Required RPMS Lab Options Tasked
LOI   IHS Lab Package LOINC Percentage Report
LRAS  Accession IHS Lab Microbiology Report
LROS  Order/test status by Order Number
LTRR  Laboratory Test (#60) File's Reference Ranges
LVP   RPMS Lab Version & Patch Report
MACC  Mark Multiple Accessions as Not Performed
MILO  Micro Interim Report by Location
MMR   Lab Description Abbreviation Report
NLO   Lab Tests Without LOINC Entries Report
ORDO  'Open Lab Orders' Reports ...
ORPH  Remove Orphans from # 68
ORPR  BROWSER REPORT ON ORPHANS FROM # 68
PAMG  Edit RPMS Lab Parameters and/or Mail Groups ...
PDOC  Patient Reminder Document
POCA  Edit BLR AGE DETAIL Parameter
      Press 'RETURN' to continue, '^' to stop:
RBE   Clear ALL BLR Errors from Error Log
REFL  Reference Lab Main Menu ...
REPL  Replace Lab Order/Test Status Report ...
SF60  IHS Search File 60
SHDR  State Health Dept Report
TCCR  Test Creatinine Clearance Logic
TGFR  Test CKD-EPI Equation Logic
VAPU  Purge All VA Alerts
      Count Accessioned Tests Using Lab Data File ...
      IHS Lab Ask-At-Order ...

```

Figure 5-2: BLR Menu

5.5 Reportable Lab Tests Data Dictionary (90475)

The Health Department Report capability for non-microbial tests is driven via entries in FileMan compliant data dictionary, REPORTABLE LAB TESTS, file 90475. The REPORTABLE LAB TESTS (90475) data dictionary is the "driver" for the Non-Microbial State Health Department report. The entries in the data dictionary triggers which test results are reported. The fields in the file are listed in the following sections.

5.5.1 Field .01 – TEST POINTER

The TEST POINTER field is a pointer to the Laboratory Test file (60). It determines what test will be selected for potential reporting.

5.5.2 Field .03 – VALUE(NUMERIC)

The VALUE(NUMERIC) field is used if the result from the Laboratory Test will be numeric. This is tied to the next field, CONDITION, in that the VALUE(NUMERIC) is checked against the Lab results using the VALUE(NUMERIC) entry combined with the entry in the Condition field.

Users may add numbers between -10000000 and 100000000, 9 Decimal Digits, as the possible numeric value.

5.5.3 Field .04 – CONDITION

The CONDITION field is used to determine if the Laboratory Test result meets the criteria to be included on the report if and only if there is a value in the VALUE(NUMERIC) field.

There are three (3) possible selections:

- 4 LESS THAN
- 5 EQUALS
- 6 GREATER THAN

5.5.4 Field 1 – VALUE SET(SET) (multiple)

The VALUE(SET) field is used if the Laboratory Test has a set of values that have been defined. Since it is a multiple, there can be as many values as needed.

Users may enter a new VALUE(SET), enter a code value representing a positive value.

5.5.5 Field 2 – REPORTING TEXT

The REPORTING TEXT field is an optional field that can rename the lab test name from the Laboratory Test file (60) to print on the State Health Department Report (SHDR). Using this field within this file, it will not change the lab test name in the Laboratory Test file (60).

5.5.6 Field 4 – VALUE(TEXT) (multiple)

The VALUE(TEXT) field is used if the Laboratory Test returns text as values. Because the field is a multiple, there are two (2) sub-fields, VALUE(TEXT) and CONDITION:

5.5.6.1 .01 VALUE(TEXT)

The VALUE(TEXT) field is used if the result from the test will be Free Texted Result. This is tied to the next field, CONDITION, in that the VALUE(TEXT) is checked against the Laboratory Test results using the VALUE(TEXT) entry combined with the entry in the CONDITION field.

5.5.6.2 .02 CONDITION

The CONDITION field is used to determine if the Laboratory Test result meets the criteria to be included on the report if and only if there is a value in the VALUE(TEXT) field.

There are four (4) possible selections:

- 2 CONTAINS
- 4 LESS THAN
- 5 EQUALS
- 6 GREATER THAN

5.6 Reportable Lab Tests Set Up

This section provides instructions for setting up tables for the following reports that may be required by state health departments:

- RPR
- Hemoglobin A1C
- Estimated GFR

Note: Contact your state health department to determine which reports are required and the parameters for those tests.

This section is organized into three (3) tasks:

- Finding the Data Name
- Reviewing the Data Name
- Setting up the reportable Laboratory Test file

5.6.1 Finding the Data Name

The first task in setting up the tables is finding the Data Name. The following procedure provides instructions.

To find the Data Name:

1. Go to VA FileMan.
2. Use Enter or Edit File Entries.
3. Enter **60** for **LABORATORY TEST**.
4. Type **DATA NAME** at the “EDIT WHICH FIELD: ALL” prompt.
5. Press Enter at the “THEN EDIT FIELD:” prompt.
6. Type **RPR** at the “Select LABORATORY TEST NAME:” prompt.
7. Type **_HEMOGLOBIN AIC** at the “Select LABORATORY TEST NAME:” prompt.
8. Press Enter.
9. Type **ESTIMATED GFR (CKD-EPI)** at the “Select LABORATORY TEST NAME:” prompt.
10. Press Enter.

```
VA FILEMAN

Enter or Edit File Entries
Print File Entries
Search File Entries
Modify File Attributes
Inquire to File Entries
Utility Functions ...
Data Dictionary Utilities ...
Transfer Entries
Other Options ...

Select VA FileMan Option: ENter or Edit File Entries

INPUT TO WHAT FILE: LABORATORY TEST//
EDIT WHICH FIELD: ALL// DATA NAME
THEN EDIT FIELD:

Select LABORATORY TEST NAME: RPR
  1  RPR  RPR
  2  RPR  RPR w/rfx (R)
CHOOSE 1-2: 1  RPR
DATA NAME: RPR//
```

```

Select LABORATORY TEST NAME: A1C
  1  A1C  _HEMOGLOBIN A1C
  2  A1C  HA1C + EAG (OIT)
  3  A1C  HGB A1c (R)
CHOOSE 1-3: 1  _HEMOGLOBIN A1C
DATA NAME: HA1C//

Select LABORATORY TEST NAME: EST
  1  EST  EST GFR
  2  EST  ESTIMATED GFR
  3  ESTIMATED AVERAGE GLUCOSE
  4  ESTIMATED GFR (CKD-EPI)
  5  ESTRONE (SQL 9087)
CHOOSE 1-5: 4  ESTIMATED GFR (CKD-EPI)
DATA NAME: CKD EPI 112016//

Select LABORATORY TEST NAME:

```

Figure 5-3: Finding the Data Name

You have captured the Data Name names for the three tests: **RPR**, **_HEMOGLOBIN A1C**, and **ESTIMATED GFR (CKD-EPI)**. The next step is to review these Data Names.

5.6.2 Reviewing the Data Names

The second task in setting up the tables is reviewing the Data Names. All laboratory patient results are stored in the LAB DATA file and the type of laboratory results (NUMERIC, SET OF CODES, FREE TEXT) being stored is directly related to the Data Name configuration.

To capture accurate laboratory results to report on the State Health Department Report, the Data Name of Lab Test files need to be reviewed. The following procedure provides instructions.

To review the Data Name:

1. Go to Laboratory DHCP menu.
2. Select **Supervisor** menu.
3. Select **LAB LIAISON** menu.
4. Select **MOD** for Modify an existing Data Name. This option allows you to modify, however you will NOT modify the Data Name, only view the Data Name configuration.
5. Type **RPR** at the “Select CHEM, HEM, TOX, RIA, SER, etc. SUB-FIELD” prompt.
6. Notice the type of Data Name for this lab test is **SET OF CODES** type.
7. Type **NO** at the “Do you wish to modify this data name?” prompt.

8. Press Enter.

```

Select Lab liaison menu Option: MOD   Modify an existing data name

This option allows modifying an existing data name.

Select CHEM, HEM, TOX, RIA, SER, etc. SUB-FIELD: RPR
  1   RPR
  2   RPR, QUANTITATIVE
  3   RPR, QUAL
CHOOSE 1-3: 1   RPR

Data Name: RPR      Subfield #: 2907725   Type: SET OF CODES
R   -   REACTIVE
N   -   NON REACTIVE

Do you wish to modify this data name? No//   (No)

```

Figure 5-4: Reviewing the Data Name

9. Select **MOD** for Modify an existing Data Name.10. Type **HA1C** at the “Select CHEM, HEM, TOX, RIA, SER, etc. SUB-FIELD” prompt.11. Notice the type of Data Name for this lab test is **NUMERIC** type.12. Type **NO** at the “Do you wish to modify this data name?” prompt.

13. Press Enter.

```

Select Lab liaison menu Option: MOD   Modify an existing data name

This option allows modifying an existing data name.

Select CHEM, HEM, TOX, RIA, SER, etc. SUB-FIELD: HA1C

Data Name: HA1C      Subfield #: 2907621   Type: NUMERIC
Input Transform: S Q9="5.0,18.9,1" D ^LRNUM
Minimum value: 5.0
Maximum value: 18.9
Maximum # decimal digits: 1

Do you wish to modify this data name? No//

```

Figure 5-5: Reviewing the Data Name

14. Select **MOD** for Modify an existing Data Name.15. Type **CKD EPI 112016** at the “Select CHEM, HEM, TOX, RIA, SER, etc. SUB-FIELD” prompt.16. Notice the type of Data Name for this lab test is **FREE TEXT** type.17. Type **NO** at the “Do you wish to modify this data name?” prompt.

18. Press Enter.

```

Select Lab liaison menu Option: MOD   Modify an existing data name

This option allows modifying an existing data name.

Select CHEM, HEM, TOX, RIA, SER, etc. SUB-FIELD: CKD
  1   CKD EPI 112016
  2   CDK EST GFR
CHOOSE 1-2: 1   CKD EPI 112016

Data Name: CKD EPI 112016   Subfield #: 2907672   Type: FREE TEXT
Input Transform: K:$L(X)>6!($L(X)<1) X
Minimum length: 1
Maximum length: 6

Do you wish to modify this data name? No//

```

Figure 5-6: Reviewing the Data Name

You have reviewed the parameters for the three tests: **RPR**, **_HEMOGLOBIN A1C**, and **ESTIMATED GFR (CKD-EPI)**. The next step is to configure the reportable lab test file.

5.6.3 Configuring the Lab Test File – Data Name (NUMERIC)

The final task in setting up the tables is configuring the Laboratory Test for the STATE HEALTH DEPARTMENT REPORT using the FileMan file named REPORTABLE LAB TESTS file.

The following example provides the data input for the Laboratory Test named **_HEMOGLOBIN A1C**, it is an atomic result-able laboratory test, and may be included in a panel Laboratory Test named HA1C + EAG, for example.

The Data Name named **HA1C** was using the **NUMERIC** type.

Add the Laboratory Test to the REPORTABLE LAB TEST file, add the values to the VALUE(NUMERIC) field for the reportable lab result value, and add to the CONDITION field to capture the numeric value as GREATER THAN.

Steps to configure the STATE HEALTH DEPARTMENT REPORT for Laboratory Test named **_HEMOGLOBIN A1C** with Data Name using NUMERIC type:

1. Go to VA FileMan.
2. Use Enter or Edit File Entries.
3. Type **REPORTABLE LAB TESTS**.
4. Press Enter at the “THEN EDIT FIELD:” prompt.

5. Type **_HEMOGLOBIN A1C** at the “Select REPORTABLE LAB TESTS TEST POINTER:” prompt.
6. Type **YES** at the “Are you adding '_HEMOGLOBIN A1C' as a new REPORTABLE LAB TESTS?:” prompt.
7. Enter **7** at the “VALUE(NUMERIC):” prompt.
8. Enter **GREATER THAN** at the “CONDITION:” prompt
9. No entry for “VALUE(SET):” prompt.
10. Type **Hemoglobin A1c** at the “REPORTING TEXT:” prompt for the lab test name to print on SHDR report- Optional.
11. No entry for “VALUE(TEXT):” prompt.
12. Press Enter.

```

Select VA FileMan Option: ENter or Edit File Entries

INPUT TO WHAT FILE: REPORTABLE LAB TESTS//
EDIT WHICH FIELD: ALL//

Select REPORTABLE LAB TESTS TEST POINTER: Are you adding '_HEMOGLOBIN A1C'
as a new REPORTABLE LAB TESTS (the 7TH)? No// Y   (Yes)
VALUE(NUMERIC): 7//
CONDITION: GREATER THAN//
Select VALUE(SET):
REPORTING TEXT: Hemoglobin A1C//
Select VALUE(TEXT):

Select REPORTABLE LAB TESTS TEST POINTER:

```

Figure 5-7: Configure the REPORTABLE LAB TESTS report

5.6.4 Configuring the Lab Test File – Data Name (SET OF CODES)

The final task in setting up the tables is configuring the Laboratory Test for the STATE HEALTH DEPARTMENT REPORT using the FileMan file named REPORTABLE LAB TESTS file.

The following example provides the data input for the Laboratory Test named RPR, it is an atomic result-able laboratory test and is not part of a panel Laboratory Test.

The Data Name named RPR was using the SET OF CODES type.

Add the Laboratory Test to the REPORTABLE LAB TEST file and add the Set Of Codes values to the VALUE(SET) field for the reportable lab result value.

Steps to configure the STATE HEALTH DEPARTMENT REPORT for Laboratory Test named RPR with Data Name using SET OF CODES type:

1. Go to VA FileMan.
2. Use Enter or Edit File Entries.
3. Type **REPORTABLE LAB TESTS**.
4. Press Enter at the “THEN EDIT FIELD:” prompt.
5. Type **RPR** at the “Select REPORTABLE LAB TESTS TEST POINTER:” prompt.
6. Type **YES** at the “Are you adding 'RPR' as a new REPORTABLE LAB TESTS?” prompt.
7. No entry for “VALUE(NUMERIC):” prompt.
8. No entry for “CONDITION:” prompt.
9. Enter **R, r, REACTIVE** at the “VALUE(SET):” prompt.
10. No entry for “REPORTING TEXT:” prompt. This field entry is optional.
11. No entry for “VALUE(TEXT):” prompt.
12. Press Enter.

```
Select VA FileMan Option: ENter or Edit File Entries

INPUT TO WHAT FILE: REPORTABLE LAB TESTS//
EDIT WHICH FIELD: ALL//

Select REPORTABLE LAB TESTS TEST POINTER: Are you adding 'RPR' as a new
REPORTABLE LAB TESTS (the 8TH)? No// Y (Yes)
VALUE(NUMERIC):
CONDITION:
Select VALUE(SET): REACTIVE
Are you adding 'REACTIVE' as a new VALUE(SET) (the 1ST for this
REPORTABLE LAB
TESTS)? No// Y (Yes)
Select VALUE(SET): "R"
Are you adding 'R' as a new VALUE(SET) (the 2ND for this REPORTABLE LAB
TESTS)? No// Y (Yes)
Select VALUE(SET): "r"
Are you adding 'r' as a new VALUE(SET) (the 3RD for this REPORTABLE LAB
TESTS)? No// Y (Yes)
Select VALUE(SET):
REPORTING TEXT:
Select VALUE(TEXT):
```



```
Select REPORTABLE LAB TESTS TEST POINTER:
```

Figure 5-8: Configure the REPORTABLE LAB TESTS report

5.6.5 Configuring the Lab Test File – Data Name (FREE TEXT)

The final task in setting up the tables is configuring the Laboratory Test for the STATE HEALTH DEPARTMENT REPORT using the FileMan file named REPORTABLE LAB TESTS file.

The following example provides the data input for the Laboratory Test named ESTIMATED GFR (CKD-EPI), it is an atomic result-able laboratory test, and it is included in multiple panels, such as Basic Metabolic Panel (BMP), Comprehensive Metabolic Panel (CMP), and Renal Panel.

The Data Name named CKD EPI 112016 was using the FREE TEXT type.

Add the Laboratory Test to the REPORTABLE LAB TEST file and add the Free Text values to the VALUE(TEXT) field for the reportable lab result value.

Steps to configure the STATE HEALTH DEPARTMENT REPORT for Laboratory Test named ESTIMATED GFR (CKD-EPI) with Data Name using FREE TEXT type:

1. Go to VA FileMan.
2. Use Enter or Edit File Entries.
3. Type **REPORTABLE LAB TESTS**.
4. Press Enter at the “THEN EDIT FIELD:” prompt.
5. Type **ESTIMATED GFR (CKD-GFR)** at the “Select REPORTABLE LAB TESTS TEST POINTER:” prompt.
6. Type **Yes** at the “Are you adding 'ESTIMATED GFR (CKD-EPI)' as a new REPORTABLE LAB TESTS?:” prompt.
7. No entry for “VALUE(NUMERIC):” prompt.
8. No entry for “CONDITION:” prompt
9. No entry for “VALUE(SET):” prompt.
10. No entry for “REPORTING TEXT:” prompt. This field entry is optional.
11. Enter **29** for “VALUE(TEXT):” prompt.
12. Enter **LESS THAN** for the “CONDITION:” prompt.

13. Press Enter.

```

Select VA FileMan Option: ENter or Edit File Entries

INPUT TO WHAT FILE: REPORTABLE LAB TESTS//
EDIT WHICH FIELD: ALL//

Select REPORTABLE LAB TESTS TEST POINTER: Are you adding 'ESTIMATED GFR
(CKD-EPI)' as a new REPORTABLE LAB TESTS (the 9TH)? No// Y   (Yes)
VALUE (NUMERIC) :
CONDITION:
Select VALUE (SET) :
REPORTING TEXT:
Select VALUE (TEXT): 60
  Are you adding '60' as a new VALUE (TEXT) (the 1ST for this REPORTABLE LAB
TESTS)? No// Y   (Yes)
  CONDITION: LESS   LESS THAN
Select VALUE (TEXT) :

Select REPORTABLE LAB TESTS TEST POINTER:

```

Figure 5-9: Configure the REPORTABLE LAB TESTS report

5.7 State Health Department Report – Report Example

The State Health Department Report (SHDR), also known as Non-Microbial State Health Department Report, the report was modified to include the RACE and ETHNICITY to the patient demographics section of the report.

To generate the State Health Department Report, use the SHDR menu option from the BLR IHS Lab Main Support Menu.

Follow the steps below to generate a report using SHDR option:

```

LR   Laboratory DHCP Menu ...
BLR  IHS Lab Main Support Menu
SHDR State Health Dept Report
  Select INSTITUTION site name
  Enter Start Date
  Enter End Date
  Select DEVICE PRINTER to print

```

Default Site/Address for Report is the name and address of the INSTITUTION selected. If there are multi-divisions at your facility, please select the appropriate facility name to generate the SHDR report.

```

Default Site/Address for Report:

  DEMO HOSPITAL
  90001 1ST AVE CORNER OF O'MALLEY
  ALBUQUERQUE FE, NM 87000

Use Site DEMO HOSPITAL as Report Header? YES// NO
Select INSTITUTION NAME: 2021 DEMO HOSPITAL (INST)// DEMO CLINIC

```

Lookup: NAME						
1	DEMO CLINIC-1	WEST	ALBUQUERQUE	02	NM	8992A
2	DEMO CLINIC-2	EAST	ALBUQUERQUE	06	MD	8992E
CHOOSE 1-2:						

Figure 5-10: Site/Address for SHDR Report

5.7.1 HEMOGLOBIN A1C – SHDR Sample Report

The following report is an example of a non-microbial state health department report. Remember when printing these reports to print to a 132 character printer.

```

NM HEALTH DEPARTMENT REPORT          DEMO HOSPITAL
          90001 1ST AVE CORNER OF O'MALLEY, ALBUQUERQUE, NM 87000
From 07/27/22 to 07/28/22  **** CONFIDENTIAL *****  Printed: 07/28/22  Page: 1

Name      ID#      DOB      Sex Lab #      Sample      Col Dt      Cpl Dt      Provider
Phone #   Address
-----
Reporting Test: Hemoglobin A1C

DEMO,ALISTER LANE      124625      05/20/1980      M      CH 0728 16      BLOOD      07/28/22      07/28/22
RADON,NICHOLAS M JR
555-555-5994      PO BOX 1302      ALB      NEW MEXICO      87119      LAB
Race: AMERICAN INDIAN OR ALASKA NATIVE      Ethnicity:
Result: 15
Current COMMUNITY:      KINGMAN

DEMO,ASHLEY      114649      02/25/2000      F      CH 0728 19      BLOOD      07/28/22      07/28/22
RADON,NICHOLAS M JR
15555559833      P.O. BOX 1038      ALB      NEW MEXICO      87119      LAB
Race: AMERICAN INDIAN OR ALASKA NATIVE      Ethnicity: NOT HISPANIC OR LATINO
Result: 10
Current COMMUNITY:      PARKER

DEMO,DEJON      115569      02/01/1949      M      CH 0728 20      BLOOD      07/28/22      07/28/22
ROMANCITO,KAREN
555-555-7538      P.O. BOX 1131      OKLAHOMA CITY      OKLAHOMA      74852      LAB
Race: AMERICAN INDIAN OR ALASKA NATIVE      Ethnicity: NOT HISPANIC OR LATINO
Result: 9
Current COMMUNITY:      SPEARFISH

DEMO,AMENDMENT ONE      124221      04/19/1954      F      CH 0728 17      BLOOD      07/28/22      07/28/22
RADON,NICHOLAS M JR
555-555-4287      46545 VERDOGORD      ALB      NEW MEXICO      87119      LAB
Race: WHITE      Ethnicity: NOT HISPANIC OR LATINO
Result: 10
Current COMMUNITY:      PHOENIX

DEMO,AMENDMENT TWO      112025      05/22/1980      M      CH 0728 18      BLOOD      07/28/22      07/28/22
RADON,NICHOLAS M JR
555-555-6579      PO BOX 2803      ALB      NEW MEXICO      87119      LAB
Race: AMERICAN INDIAN OR ALASKA NATIVE      Ethnicity: NOT HISPANIC OR LATINO
Result: 13
Current COMMUNITY:      PARKER

_____  

Medical Technologist                               Date
    
```

Figure 5-11: State Health Department Report Patient Example.

5.7.2 RPR – SHDR Sample Report

The following report is an example of a non-microbial state health department report. Remember when printing these reports to print to a 132 character printer.

NM HEALTH DEPARTMENT REPORT				DEMO HOSPITAL				
90001 1ST AVE CORNER OF O'MALLEY, ALBUQUERQUE, NM 87000								
From 07/27/22 to 07/28/22		***** CONFIDENTIAL *****		Printed: 07/28/22		Page: 1		
Name	ID#	DOB	Sex	Lab #	Sample	Col Dt	Cpl Dt	Provider
Phone #		Address					Location	

Reporting Test: RPR								
DEMO, ALISTER LANE 124625 05/20/1980 M CH 0728 11 SERUM 07/28/22 07/28/22								
RADON, NICHOLAS M JR								
555-555-5994 PO BOX 1302 ALB NEW MEXICO 87119 LAB								
Race: AMERICAN INDIAN OR ALASKA NATIVE Ethnicity:								
Result: REACTIVE								
Current COMMUNITY: KINGMAN								
DEMO, ASHLEY 114649 02/25/2000 F CH 0728 14 SERUM 07/28/22 07/28/22								
RADON, NICHOLAS M JR								
1555559833 P.O. BOX 1038 ALB NEW MEXICO 87119 LAB								
Race: AMERICAN INDIAN OR ALASKA NATIVE Ethnicity: NOT HISPANIC OR LATINO								
Result: REACTIVE								
Current COMMUNITY: PARKER								
DEMO, AMENDMENT ONE 124221 04/19/1954 F CH 0728 12 SERUM 07/28/22 07/28/22								
RADON, NICHOLAS M JR								
555-555-4287 46545 VERDOGORD ALB NEW MEXICO 87119 LAB								
Race: WHITE Ethnicity: NOT HISPANIC OR LATINO								
Result: REACTIVE								
Current COMMUNITY: PHOENIX								
DEMO, AMENDMENT TWO 112025 05/22/1980 M CH 0728 13 SERUM 07/28/22								
07/28/22								
RADON, NICHOLAS M JR								
555-555-6579 PO BOX 2803 ALB NEW MEXICO 87119 LAB								
Race: AMERICAN INDIAN OR ALASKA NATIVE Ethnicity: NOT HISPANIC OR LATINO								
Result: REACTIVE								
Current COMMUNITY: PARKER								
HAVATONE, MARLENE 109064 05/06/1932 F CH 0728 15 SERUM 07/28/22 07/28/22								
RADON, NICHOLAS M JR								
555-555-9593 P.O BOX 1970 ALB NEW MEXICO 87119 LAB								
Race: AMERICAN INDIAN OR ALASKA NATIVE Ethnicity:								
Result: REACTIVE								
Current COMMUNITY: PEACH SPRGS								
_____ Medical Technologist				_____ Date				

Figure 5-12: State Health Department Report Patient Example

5.7.3 ESTIMATED GFR – SHDR Sample Report

The following report is an example of a non-microbial state health department report. Remember when printing these reports to print to a 132 character printer.

NM HEALTH DEPARTMENT REPORT				DEMO HOSPITAL			
90001 1ST AVE CORNER OF O'MALLEY, ALBUQUERQUE, NM 87000							

Name		ID#	DOB	Sex	Lab #	Sample	Col Dt	Cpl Dt	Provider
Phone #		Address							Location
From 07/27/22 to 07/28/22 ***** CONFIDENTIAL *****									
Printed: 07/28/22 Page: 1									

Reporting Test: ESTIMATED GFR (CKD-EPI)									
DEMO, ALISTER LANE			124625		05/20/1980	M CH 0728 7		SERUM	07/28/22
07/28/22 RADON, NICHOLAS M JR		555-555-5994			PO BOX 1302		ALB		NEW MEXICO
87119 LAB		Race: AMERICAN INDIAN OR ALASKA NATIVE			Ethnicity:				
		Result: 25.48							
		Current COMMUNITY: KINGMAN							
DEMO, ASHLEY			114649		02/25/2000	F CH 0728 8		SERUM	07/28/22
07/28/22 RADON, NICHOLAS M JR		15555559833			P.O. BOX 1038		ALB		NEW MEXICO
87119 LAB		Race: AMERICAN INDIAN OR ALASKA NATIVE			Ethnicity: NOT HISPANIC OR LATINO				
		Result: 28.96							
		Current COMMUNITY: PARKER							
DEMO, AMENDMENT ONE			124221		04/19/1954	F CH 0728 6		SERUM	07/28/22
07/28/22 RADON, NICHOLAS M JR		555-555-4287			46545 VERDOGORD		ALB		NEW MEXICO
87119 LAB		Race: WHITE			Ethnicity: NOT HISPANIC OR LATINO				
		Result: 27.68							
		Current COMMUNITY: PHOENIX							
Medical Technologist					Date				

Figure 5-13: State Health Department Report Patient Example

6.0 In-Patient Lab Orders – Lab Collect

Inpatient laboratory test orders for blood specimens to be drawn as part of a scheduled lab collection entered in the RPMS/Electronic Health Record (EHR) using the **Lab Collect** routine - means the phlebotomist from laboratory will draw the blood specimens from patients that are on Inpatient ward(s).

The orders for the In-Patient wards are entered into the computer by the physician, clerk, or nurse before the cut-off times to ensure the tests will be included on the COLLECTION LIST.

The defined collection times can be added to the PHLEBOTOMY ORDER CUT-OFF TIME field within the LABORATORY SITE (69.9) file.

Those orders are retained by the Laboratory software and combined when the collection list is created using the **Add to Collection List** option.

The lab can then print the collection list and labels by using the Print Collection List/Labels option for use during the draw.

Receipt of the specimens collected and cancellation of those not collected (with the appropriate comments) is acknowledged using the **Itemized Routine Lab Collection** or **Receipt of Routine Lab Collection from Wards** options to release the accessions for generation of work in the lab.

The labeled specimens are then distributed to each laboratory area for processing.

6.1 Modified Routines – Lab Collect

BLRRLEVN routine was written to correct errors using Lab Collect and Reference Laboratory orders

BLRSHPM routine was written to correct the error of incorrect DOB & GENDER printing on the Shipping Manifest for Reference Lab Orders.

6.2 Using Lab Collect

6.2.1 Print Lab Collection List:

Each morning the laboratory staff will collect blood specimens for testing from in-house patients. The laboratory staff must build/create a COLLECTION LIST of tests ordered in Electronic Health Records for the inpatients. The RPMS Laboratory Package system will build the COLLECTION LIST that is organized and defined by ward location, patient name, and laboratory tests. Once the COLLECTION LIST is created and completed, it will print the list and labels.

1. Select **Laboratory Menu** option.
2. Select **Phlebotomy Menu** option.
3. Select **Add to collection list** option.
4. Date and Time of collection: T@7:00AM//
 - a. **Defaults to the next timed collection**
5. Are you sure? No// **YES**
 - a. *The collection list for, last timed draw, still exist, you must clear it before building a new list.*
6. Are you ready to clear the current collection list and start a new one? No// **YES**
7. BUILDING THE LIST:
8. Once the Collection List is created, you will have two (2) options, select **LIST**.
9. No entry for “Starting Location:” prompt.
10. No entry for “Ending Location:” prompt.
11. **DEVICE:** printer for list
 - a. Once the List is printed, you will have two (2) options, again, select **LABELS**.
12. Print labels on **LABLABEL**.
13. No entry for “Station Location:” prompt.
14. No entry for “Ending Location:” prompt.
15. No entry for “Request Start Time:” prompt.
16. No entry for “Choose:” prompt.

```
RPMS Laboratory Menu
```

```

  1      Phlebotomy menu   ...
  2      Accessioning menu
  3      Process data in lab menu
  4      Quality control menu
  5      Results menu
 10      Microbiology menu
 11      Supervisor menu
BLR      IHS Lab Main Support Menu
WARD     Ward lab menu
```

```
Select Laboratory DHCP Menu Option: 1   Phlebotomy menu
```

```
Add tests to a given accession.
```

Add tests to an already existing order number.

Add to collection list

Delete entire order or individual tests
 Itemized routine lab collection
 Lab orders by collection type
 Lab test order
 List of lab orders not collected
 List of orders not collected (Long form)
 Order/test status
 Print collection list/labels
 Print future collection labels
 Print single future collection label
 Receipt of routine lab collection from wards
 Test description information
 Ward lab menu

Select Phlebotomy menu Option: ADD TO COLLECTION LIST

Date and Time of collection: **T@10:00AM//** (JUL 29, 2022@10:00)

Are you sure? No// **Y (Yes)**

The collection list for 05/20/2022 10:30 still exists, you must clear it before building a new list.

Are you ready to clear the current collection list and start a new one?

No// **Y (Yes)**

BUILDING THE LIST

3 specimens added to collection list.

1 LIST

2 LABELS

Choose: 1

Starting Location: **<RETURN>**

Ending location: **<RETURN>**

DEVICE:

1 LIST

2 LABELS

Choose: 2

Print labels on: LABLABEL// LABLABEL

Starting Location: **<RETURN>**

Ending location: **<RETURN>**

Requested Start Time: NOW// **<RETURN>**

1 LIST

2 LABELS

Choose: **<RETURN>**

Add tests to a given accession.

Add tests to an already existing order number.

Add to collection list

Delete entries order or individual tests.

Itemized routine lab collection

Lab orders by collection type

Lab test order

List of lab orders not collected

List of orders not collected (Long form)

Order/test status

Print collection list/labels

Print future collection labels

```
Print single future collection label
Receipt of routine lab collection from wards
Test description information
Ward lab menu ...
```

Figure 6-1: Building the Collection List

6.2.2 Receiving AM Lab Collect Specimens:

After the phlebotomists have completed the blood sample collections, they return to the laboratory department to “RECEIVE” the specimens in the RPMS Laboratory Package system.

Laboratory orders for Lab Collect can be posted to the collection list that are not collected and can be held for collections at a later time or cancelled.

Laboratory orders for Lab Collect can be posted to the collection list that are COLLECTED but not received (date/time of actual of collection), will have to be received at the time the results for the requested tests are verified using the **EM** enter/verify/modify (manual) *or* **EA** Enter/verify data (auto instrument) resulting.

1. Select **Laboratory Menu** option.
2. Select **Phlebotomy Menu** option.
3. Select **Receipt of routine lab collections from wards** option.
 - a. Receipt of collection for each ward-location.
4. Select PATIENT LOCATION: ALL//
 - a. Type in first ward-location.
5. Enter Order Numbers *not* collected:
6. Enter Order #(s):
 - a. Enter the lab order number(s) NOT COLLECTED.
 - b. Now enter any orders that are not canceled but you do not want "collected", yet.
 - c. If all remaining orders are collected, skip this entry.
 - d. Any order #'s entered here will remain on collection list until 12 midnight.
 - e. The orders will not 'rollover' to the next day's collection list.
7. Enter Order #(s):
 - a. Type the order number(s) COLLECTED for *first* ward-location.
8. Enter Order #(s):

9. Ready to accept the rest of the orders? No//**YES**
10. Select PATIENT LOCATION: ALL//
 - a. Type in second ward-location.
11. Enter Order Numbers not collected:
12. Enter Order #(s):
 - a. Enter the lab order number(s) NOT COLLECTED.
 - b. Now enter any orders that are not canceled but you do not want "collected", yet.
 - c. If all remaining orders are collected, skip this entry.
 - d. Any order #'s entered here will remain on collection list until 12 midnight.
 - e. The orders will not 'rollover' to the next day's collection list.
13. Enter Order #(s):
 - a. Type the order number(s) COLLECTED for *second* ward-location.
14. Enter Order #(s):
15. Ready to accept the rest of the orders? No//**YES**
16. REPEAT for each 'LOCATION' or ward-location.

RPMS Laboratory Menu

```

1      Phlebotomy menu   ...
2       Accessioning menu
3       Process data in lab menu
4       Quality control menu
5       Results menu
10      Microbiology menu
11      Supervisor menu
BLR     IHS Lab Main Support Menu
WARD    Ward lab menu

```

Select Laboratory DHCP Menu Option: 1 Phlebotomy menu

```

Add tests to a given accession.
Add tests to an already existing order number.
Add to collection list
Delete entire order or individual tests
Itemized routine lab collection
Lab orders by collection type
Lab test order
List of lab orders not collected
List of orders not collected (Long form)
Order/test status
Print collection list/labels
Print future collection labels
Print single future collection label
Receipt of routine lab collection from wards

```

Test description information
Ward lab menu

Select Phlebotomy menu <TEST ACCOUNT> Option: REceipt of routine lab collection from wards

Select PATIENT LOCATION: ALL// **ICU** {first ward-location}
Enter Order Numbers not collected:
Enter Order #(s):

Now enter any orders that are not canceled but you don't want "collected", yet.

If all remaining orders are collected, skip this entry.
Any order #'s entered here will remain on collection list until 12 midnight.

The orders will not 'rollover' to the next days collection list.
Enter Order #(s):

1179

1179 OK,
Enter Order #(s):

Ready to accept the rest of the orders? No// **YES**

Select PATIENT LOCATION: ALL// **EAST RM 110** {second ward-location}
You're doing the entire collection? No// **YES** (Yes)
Enter Order Numbers not collected:
Enter Order #(s):

Now enter any orders that are not canceled but you don't want "collected", yet.

If all remaining orders are collected, skip this entry.
Any order #'s entered here will remain on collection list until 12 midnight.

The orders will not 'rollover' to the next days collection list.
Enter Order #(s):

1178

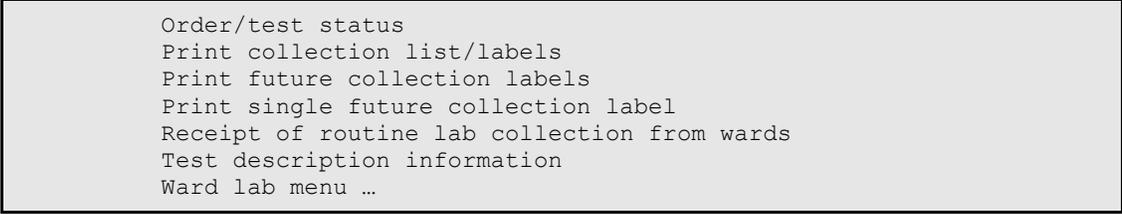
1178 OK,
Enter Order #(s):

Ready to accept the rest of the orders? No// **YES** (Yes)

Select PATIENT LOCATION: ALL// **{Repeats - different ward-location}**

Ready to accept the rest of the orders? No// (No)

Add tests to a given accession.
Add tests to an already existing order number.
Add to collection list
Delete entire order or individual tests
Itemized routine lab collection
Lab orders by collection type
Lab test order
List of lab orders not collected
List of orders not collected (Long form)



```
Order/test status
Print collection list/labels
Print future collection labels
Print single future collection label
Receipt of routine lab collection from wards
Test description information
Ward lab menu ...
```

Figure 6-2: Receipt of routine lab collection from wards

7.0 IHS LAB TRANSACTION LOG – Add LOINC and IHS LOINC Codes to the File

Confirming all laboratory data passes to Patient Care Component (PCC), Laboratorians should review the data using the INQ Inquire into the IHS LAB Transaction Log. The INQ menu option is on the BLR IHS Lab Main Support Menu, and the BLR Menu is located on the Laboratory DHCP Menu.

In order for the PCC to accept LOINC DATA that is passed from the Laboratory Package, an entry must exist in the Site/Specimen for the result-able laboratory test that contains the result.

In order for the PCC to accept CPT DATA that is passed from the Laboratory Package, an entry must exist in the IHS LAB CPT CODE file for each billable lab test associated with the lab order. The entry must identify the associated panel or test.

Follow the steps below to review laboratory data using INQ:

```
LR   Laboratory DHCP Menu ...
BLR  IHS Lab Main Support Menu
     INQ Inquire into the IHS LAB Transaction Log
```

INQ Inquire into the IHS LAB Transaction Log. (Example: Panel)

Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER: HE 22 18

- 1 HE 22 18 1312 *(This is the Panel Test)*
- 2 HE 22 18 1313 *(This is the First Atomic Test in the Panel)*
- 3 HE 22 18 1314 *(This is the Second Atomic Test in the Panel)*
- 4 HE 22 18 1315 *(This is the Third Atomic Test in the Panel)*
- 5 HE 22 18 1316 *(This is the Fourth Atomic Test in the Panel)*
- 6 HE 22 18 1317 *(This is the Fifth Atomic Test in the Panel)*

INQ Inquire into the IHS LAB Transaction Log. (Example: CBC PANEL)

Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER: **HE 22 18**

7.1 Example: INQ Inquire into the IHS LAB Transaction Log

This example displays the lab data for the resulted accession number **HE 22 18**. Review the Status Flag as **Resulted**, Billing **CPT-85025**, **LOINC** codes per Atomic Lab Test, and the **IHS LOINC** code for the Panel Lab Test (IHS LOINC is the ORDER LOINC).

```

LR      Laboratory DHCP Menu ...
IHS Lab Main Support Menu

LS      Link Transaction Processor Status
7421    Will restart the 7421 label routine if turned off.
INQ   Inquire into the IHS LAB Transaction Log
CPT     Enter/edit IHS Lab CPT File
STP     Stop/restart Lab to PCC Transaction Processor
PAMG    Edit IHS Lab Parameters and/or Mail Groups ...
LVP     IHS Lab Version & Patch Report

Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER: HE 22 18
  1 HE 22 18 1312
  2 HE 22 18 1313
  3 HE 22 18 1314
  4 HE 22 18 1315
  5 HE 22 18 1316
Press <RETURN> to see more, '^' to exit this list, OR
CHOOSE 1-5: 1 1312

DEVICE:  Virtual
IHS LAB TRANSACTION LOG LIST                JUL 27, 2022  17:19  PAGE
1
-----

SEQUENCE NUMBER: 1312                      LRFIL: 2
PATIENT POINTER VALUE: 26737
PANEL/TEST POINTER: CBC W/Auto DIFF <-PANEL TEST
LAB MODULE: GENERAL                        DUZ(2): 2906
I/O CATEGORY: OUT PATIENT                  STATUS FLAG: RESULTED
ENTRY DATE/TIME: JUL 27, 2022@16:58:32
ASSOCIATED V FILE: V LAB                  IEN OF V FILE ENTRY: 4295142
CLINIC STOP CODE POINTER: LABORATORY SERVICES
CPT LAB CODE POINTER: CBC W/AUTO DIFF
BILLING CPT STRING: 85025|||||          CLINICAL INDICATOR: 139690015
ORDER DATE: JUL 27, 2022@16:58:21        ORDER SEQUENCE NUMBER: 1
ORDER NUMBER: 1155
ORDERING PROVIDER POINTER: RADON,NICHOLAS M JR
ORDERING LOCATION POINTER: LAB HOSPITAL (LOC)
COLLECTION DATE/TIME: JUL 27, 2022@16:58:21
ACCESSION NUMBER: HE 22 18                COLLECTION SAMPLE POINTER: BLOOD
(EDTA)
COMPLETE DATE: JUL 27, 2022@17:00:21    LOINC CODE: 57021 <- ORDER LOINC
CODE
PROVIDER NARRATIVE: Fatigue                SNOMED: 139690015
ICD: R53.83                               SITE/SPECIMEN POINTER: BLOOD

Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER: 1313

DEVICE:  Virtual
IHS LAB TRANSACTION LOG LIST                JUL 27,2022  17:20  PAGE 1
-----

SEQUENCE NUMBER: 1313                      LRFIL: 2
PATIENT POINTER VALUE: 26737              PANEL/TEST POINTER: WBC. <- Lab
Test
    
```

```

LAB MODULE: GENERAL                DUZ(2): 2906
I/O CATEGORY: OUT PATIENT          PARENT POINTER: 1312
STATUS FLAG: RESULTED             ENTRY DATE/TIME: JUL 27,
2022@16:58:32
ASSOCIATED V FILE: V LAB          IEN OF V FILE ENTRY: 4295143
CLINIC STOP CODE POINTER: LABORATORY SERVICES
ORDER DATE: JUL 27, 2022@16:58:21 ORDER SEQUENCE NUMBER: 1
ORDER NUMBER: 1155
ORDERING PROVIDER POINTER: RADON,NICHOLAS M JR
ORDERING LOCATION POINTER: LAB HOSPITAL (LOC)
COLLECTION DATE/TIME: JUL 27, 2022@16:58:21
ACCESSION NUMBER: HE 22 18        COLLECTION SAMPLE POINTER: BLOOD
(EDTA)
COMPLETE DATE: JUL 27, 2022@17:00:21 LOINC CODE: 33765  <- RESULT LOINC
CODE
RESULT: 6.7                        UNITS: 10*3/uL
SITE/SPECIMEN POINTER: BLOOD       VERIFIER POINTER: DEMO, TECH
REFERENCE LOW: 4.3                 REFERENCE HIGH: 10.8

```

Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER: 1314

```

DEVICE: Virtual
IHS LAB TRANSACTION LOG LIST          JUL 27,2022  17:20    PAGE 1
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```

```

SEQUENCE NUMBER: 1314              LRFIL: 2
PATIENT POINTER VALUE: 26737      PANEL/TEST POINTER: RBC.  <- Lab
Test
LAB MODULE: GENERAL                DUZ(2): 2906
I/O CATEGORY: OUT PATIENT          PARENT POINTER: 1312
STATUS FLAG: RESULTED             ENTRY DATE/TIME: JUL 27,
2022@16:58:32
ASSOCIATED V FILE: V LAB          IEN OF V FILE ENTRY: 4295144
CLINIC STOP CODE POINTER: LABORATORY SERVICES
ORDER DATE: JUL 27, 2022@16:58:21 ORDER SEQUENCE NUMBER: 1
ORDER NUMBER: 1155
ORDERING PROVIDER POINTER: RADON,NICHOLAS M JR
ORDERING LOCATION POINTER: LAB HOSPITAL (LOC)
COLLECTION DATE/TIME: JUL 27, 2022@16:58:21
ACCESSION NUMBER: HE 22 18        COLLECTION SAMPLE POINTER: BLOOD
(EDTA)
COMPLETE DATE: JUL 27, 2022@17:00:21 LOINC CODE: 789  <- RESULT LOINC
CODE
RESULT: 5.03                       UNITS: M/uL
SITE/SPECIMEN POINTER: BLOOD       VERIFIER POINTER: DEMO, TECH
REFERENCE LOW: 4                   REFERENCE HIGH: 5.4

```

Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER: 1315

```

DEVICE: Virtual
IHS LAB TRANSACTION LOG LIST          JUL 27,2022  17:20    PAGE 1
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```

```

SEQUENCE NUMBER: 1315              LRFIL: 2
PATIENT POINTER VALUE: 26737      PANEL/TEST POINTER: HGB.  <- Lab
Test
LAB MODULE: GENERAL                DUZ(2): 2906

```

I/O CATEGORY: OUT PATIENT PARENT POINTER: 1312
 STATUS FLAG: RESULTED ENTRY DATE/TIME: JUL 27,
 2022@16:58:32
 ASSOCIATED V FILE: V LAB IEN OF V FILE ENTRY: 4295145
 CLINIC STOP CODE POINTER: LABORATORY SERVICES
 ORDER DATE: JUL 27, 2022@16:58:21 ORDER SEQUENCE NUMBER: 1
 ORDER NUMBER: 1155
 ORDERING PROVIDER POINTER: RADON,NICHOLAS M JR
 ORDERING LOCATION POINTER: LAB HOSPITAL (LOC)
 COLLECTION DATE/TIME: JUL 27, 2022@16:58:21
 ACCESSION NUMBER: HE 22 18 COLLECTION SAMPLE POINTER: BLOOD
 (EDTA)
 COMPLETE DATE: JUL 27, 2022@17:00:21 **LOINC CODE: 30313 <- RESULT LOINC
 CODE**
 RESULT: 14.7 UNITS: g/dL
 SITE/SPECIMEN POINTER: BLOOD VERIFIER POINTER: DEMO, TECH
 REFERENCE LOW: 13.5 REFERENCE HIGH: 18

Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER: 1316

DEVICE: Virtual
 IHS LAB TRANSACTION LOG LIST JUL 27,2022 17:20 PAGE 1

SEQUENCE NUMBER: 1316 LRFILE: 2
 PATIENT POINTER VALUE: 26737 **PANEL/TEST POINTER: HCT. <- Lab**
Test
 LAB MODULE: GENERAL DUZ(2): 2906
 I/O CATEGORY: OUT PATIENT PARENT POINTER: 1312
 STATUS FLAG: RESULTED ENTRY DATE/TIME: JUL 27,
 2022@16:58:32
 ASSOCIATED V FILE: V LAB IEN OF V FILE ENTRY: 4295146
 CLINIC STOP CODE POINTER: LABORATORY SERVICES
 ORDER DATE: JUL 27, 2022@16:58:21 ORDER SEQUENCE NUMBER: 1
 ORDER NUMBER: 1155
 ORDERING PROVIDER POINTER: RADON,NICHOLAS M JR
 ORDERING LOCATION POINTER: LAB HOSPITAL (LOC)
 COLLECTION DATE/TIME: JUL 27, 2022@16:58:21
 ACCESSION NUMBER: HE 22 18 COLLECTION SAMPLE POINTER: BLOOD
 (EDTA)
 COMPLETE DATE: JUL 27, 2022@17:00:21 **LOINC CODE: 20570 <- RESULT LOINC
 CODE**
 RESULT: 45.6 RESULT N/A FLAG: H
 UNITS: % SITE/SPECIMEN POINTER: BLOOD
 VERIFIER POINTER: DEMO, TECH REFERENCE LOW: 35
 REFERENCE HIGH: 45

Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER: 1317

DEVICE: Virtual
 IHS LAB TRANSACTION LOG LIST JUL 27,2022 17:20 PAGE 1

SEQUENCE NUMBER: 1317 LRFILE: 2
 PATIENT POINTER VALUE: 26737 **PANEL/TEST POINTER: MCV. <- Lab**
Test
 LAB MODULE: GENERAL DUZ(2): 2906

```
I/O CATEGORY: OUT PATIENT          PARENT POINTER: 1312
STATUS FLAG: RESULTED              ENTRY DATE/TIME: JUL 27,
2022@16:58:32
ASSOCIATED V FILE: V LAB           IEN OF V FILE ENTRY: 4295147
CLINIC STOP CODE POINTER: LABORATORY SERVICES
ORDER DATE: JUL 27, 2022@16:58:21  ORDER SEQUENCE NUMBER: 1
ORDER NUMBER: 1155
ORDERING PROVIDER POINTER: RADON,NICHOLAS M JR
ORDERING LOCATION POINTER: LAB HOSPITAL (LOC)
COLLECTION DATE/TIME: JUL 27, 2022@16:58:21
ACCESSION NUMBER: HE 22 18         COLLECTION SAMPLE POINTER: BLOOD
(EDTA)
COMPLETE DATE: JUL 27, 2022@17:00:21  LOINC CODE: 787  <- RESULT LOINC
CODE
RESULT: 91                          UNITS: fL
SITE/SPECIMEN POINTER: BLOOD        VERIFIER POINTER: DEMO, TECH
REFERENCE LOW: 80                   REFERENCE HIGH: 100

Select IHS LAB TRANSACTION LOG SEQUENCE NUMBER:
```

Figure 7-1: IHS Lab Transaction Log List display

8.0 Modified Routines

Several routines have been modified in order to prevent errors and/or correct issues.

8.1 BLRRLEDI

Reference Lab – Fix Incorrect Patient Name & Chart Number.

8.2 LR7OF1

Reference laboratory to retrieve the correct lab order number.

8.3 BLRSLTL1

Routine was modified so that the correct variable containing the patient's IEN is used to retrieve the I/O Category.

8.4 LRORDST

Routine was modified so that if the BLRLOG variable does not exist no error will occur and the event will be handled in the appropriate manner.

8.5 LR7OGMP

Routine was modified so that IHS UCUM file pointer is used appropriately.

8.6 BLR7OGMP

Routine modified so that UID is used to retrieve arrival time from the accession file.

8.7 LRXREF1

Routine modified so that missing data will be handled appropriately.

8.8 LRVER, LRVR, and LRVR1

Routines modified so that fatal error will not occur and messages to the user regarding the issue are appropriate.

8.9 BLRTN

Routine modified to use correct accession variable so as to correctly calculate result date/time.

8.10 LRL2

Routine was modified so that, if invoked, it will only display the last four (4) digits of the SSN.

8.11 LR7OB69

Routine was modified so that if certain variables do not exist, they will no longer cause errors but will be handled in the appropriate manner.

8.12 LRLLP5

Routine was modified so that, if invoked, it will only display the last four (4) digits of the SSN.

8.13 LRSPRT2

Routine was modified so that, if invoked, it will only display the last four (4) digits of the SSN.

8.14 LRVRA

Routine was modified so that, if invoked, it will only display the last four (4) digits of the SSN.

9.0 REFERRAL PATIENT (#67) File New Cross Reference

A new cross-reference, the "E" Patient File Reference, has been added to the REFERRAL PATIENT (#67) file.

9.1 Data Dictionary Listing

The Data Dictionary listing is:

CROSS REFERENCE: 67^E

1)= S ^LRT("E",\$E(X,1,30),DA)=""

2)= K LRT("E",\$E(X,1,30),DA)

Glossary

Accession Area

A functional area or department in the laboratory where specific tests are performed.

Accession Number

A unique alpha-numeric (combination of letters and numbers) assigned to an individual patient specimen when it is received in the laboratory.

File

A set of related records or entries treated as a single unit.

FileMan

The database management system for the VA's VistA system and IHS' RPMS system.

HL7

Health Level Seven. An ANSI approved American National Standard for electronic data exchange in health care

ICD

International Classification of Diseases. It is formally known as the International Statistical Classification of Diseases and Related Health Problems, a medical classification list by the World Health Organization (WHO).

IEN

Internal Entry Number. A unique number used to identify an entry within a file.

IHS

Indian Health Service. An Operating Division (OPDIV) within the U.S. Department of Health and Human Services (HHS).

Menu

A list of choices for computing activity. A menu is a type of option designed to identify a series of items (other options) for presentation to the user for selection.

MUMPS

MUMPS (Massachusetts General Hospital Utility Multi-Programming System) or alternatively M, is a general-purpose computer programming language that provides ACID (Atomic, Consistent, Isolated, and Durable) transaction processing.

Parameter

A name in a function or subroutine definition that is replaced by, or bound to, the corresponding actual argument when the function or subroutine is called.

RPC

Remote Procedure Call. A client/server system within Department of Veterans Affairs (VA) Veterans Health Information Systems and Technology Architecture (VistA) environment. It establishes a common and consistent foundation for client/server applications to communicate and exchange data with M Servers.

RPMS

Resource and Patient Management System. A suite of software applications used at IHS facilities to support administrative, clerical, and clinical functions.

SNOMED

Systematized Nomenclature of Medicine. A systematic, computer-processable collection of medical terms, in human and veterinary medicine, to provide codes, terms, synonyms and definitions which cover anatomy, diseases, findings, procedures, microorganisms, substances, etc.

TaskMan

A Kernel sub module that allows tasks (e.g., VA FileMan prints and sorts) to run in the background.

VA

Veteran's Administration. United States Department of Veterans Affairs

VistA

The Veterans Health Information Systems and Technology Architecture. An enterprise-wide information system built around an Electronic Health Record (EHR), used throughout the VA medical system.

Acronym List

Acronym	Term Meaning
CPT	Current Procedural Terminology
EHR	Electronic Health Record
IHS	Indian Health Service
PCC	Patient Care Component
POC	Point of Care
RPMS	Resource and Patient Management System

Contact Information

If you have any questions or comments regarding this distribution, please contact the IHS IT Service Desk.

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